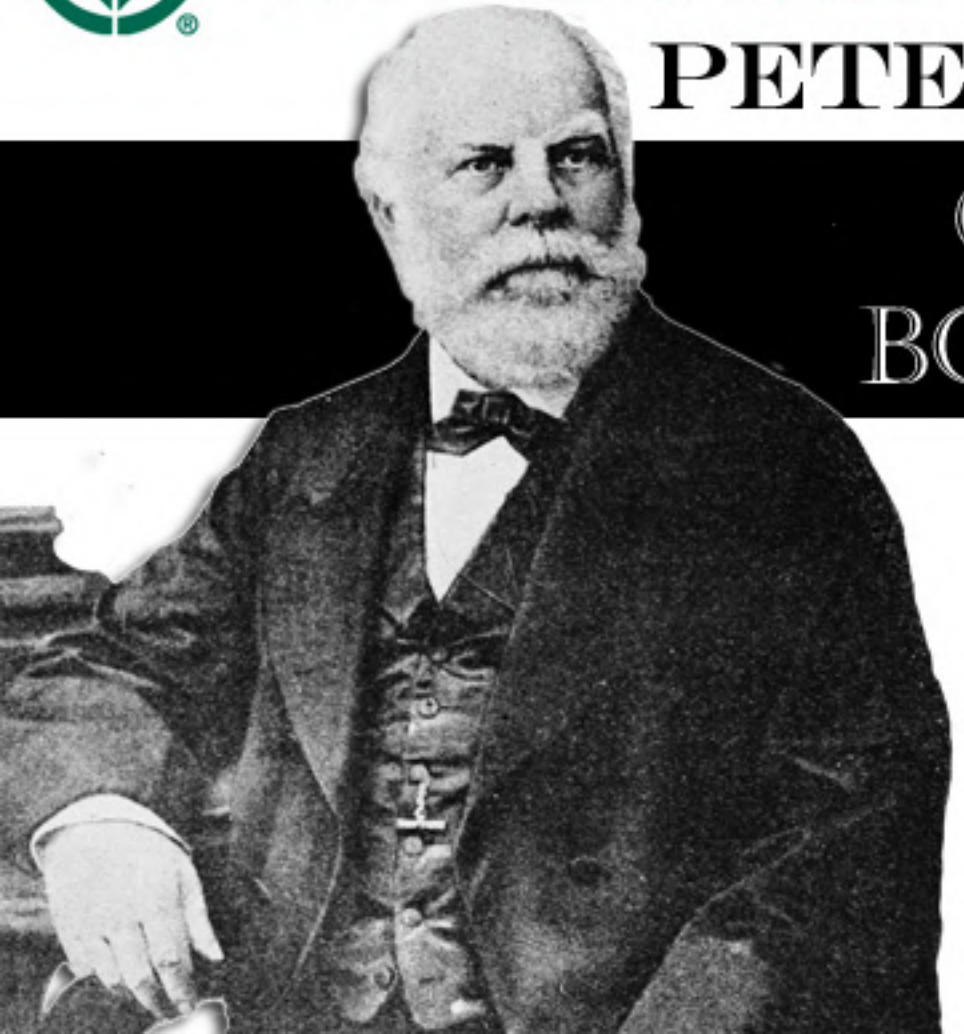
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

9

Potentilla fissa

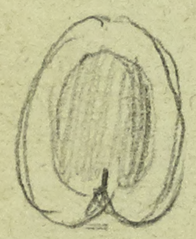
June 6 1867

Bearpeak, Hayden.

694

× 10

ripe achens, style
attached nearly at base
achen very slightly rugulose



anther × 10

Commissure very
large dark = th
dry plant
anther cells united!
horseshoe form

Receptacle
glabrous, villous

Alex. Leitch,

APOTHECARY & CHEMIST,

Cor 4th & Olive Sts. St. Louis.

694A

2.—*Monthly Mean of Temperature, Fahrenheit.*

JANUARY.

YEAR.	6 A. M.	9 A. M.	12 M.	3 P. M.	6 P. M.	9 P. M	MEAN OF MONTH.
1861	26.9	29.5	35.3	37.4	33.5	30.8	32.2
1862	27.1	27.3	30.1	30.7	29.5	28.5	28.9
1863	31.9	34.0	39.4	41.2	38.3	36.1	36.8
1864	22.6	25.2	32.6	35.1	31.5	28.0	29.2
1865	21.9	24.2	31.5	33.1	30.2	27.9	28.1
1866	27.0	29.1	34.8	36.8	33.8	31.5	32.2
Mean	26.2	28.2	33.9	35.7	32.8	30.5	31.2

FEBRUARY.

YEAR.	6 A. M.	9 A. M.	12 M.	3 P. M.	6 P. M.	9 P. M	MEAN OF MONTH.
1861	34.2	35.4	43.7	46.7	42.8	39.7	40.4
1862	23.9	27.0	33.6	35.9	31.9	29.2	30.2
1863	31.3	33.7	38.7	39.4	36 6	34.4	35.7
1864	30.4	34.4	42.2	45.5	40.9	36.4	38.3
1865	33.4	36.1	41.7	43.3	39.4	36.8	38.4
1866	27.3	30.0	37.0	38.7	35.2	32.5	33.4
Mean	30.1	32.8	39.5	41.6	37.8	34.8	36.1

3.—*Monthly Mean of Relative Humidity.*

JANUARY.

YEAR	6 A. M.	9 A. M.	12 M.	3 P. M.	6 P. M.	9 P. M.	MEAN OF MONTH.
1861	....	....	....	....	....	....	72.2
1862	91.5	87.5	78.5	79.0	85.2	90.0	85.3
1863	94.1	83.9	75.0	71.9	79.3	86.0	81.7
1864	90.8	79.3	65.9	62.7	75.4	79.8	75.6
1865	89.3	77.5	64.3	62.8	73.7	79 9	74.6
1866	87.1	77.1	67.2	65.3	74.6	79.1	75.1
Mean	90.6	81.1	70.2	68.3	77.6	82.9	77.4

FEBRUARY.

YEAR	6 A. M.	9 A. M.	12 M.	3 P. M.	6 P. M.	9 P. M.	MEAN OF MONTH.
1861	....	....	....	....	....	....	63.3
1862	89.1	79.2	65.8	61.5	72.2	75.5	73.9
1863	94.1	83.9	75.0	71.9	79.3	86.0	81.7
1864	79.0	65.0	53.5	49.0	59.9	70.0	62.7
1865	86.2	73.8	63.7	60.8	70.8	76.7	72.0
1866	85.3	70.8	62.9	59.5	68.6	76.5	70.6
Mean	86.8	74.5	64.2	60.5	70.2	76.9	70.7

Errata. In the last No. of *Journal*, on page 70, line 6, for the word "*destination*" read *declination*.

Potentilla

31-3

Editorial Department.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

PAGET'S SURGICAL PATHOLOGY.

[Continued.]

Mr. Paget embraces in his theory the doctrine of complemental nutrition, first taught by C. F. Wolff, illustrating the subject as follows:

"A great change in nutrition rarely takes place in a single organ at a time; for example, the growth of the beard at the period of puberty in man, the growth and perfection of the plumage of the bird at breeding time; but as in man, when the development of the genital organs is prevented, that of the beard and all other external sexual characters is, as a consequence, hindered, so in birds, when the breeding season ends, and the sexual organs pass gradually into their periodic atrophy, at once the plumage begins to assume the pale and more sober colors, which characterizes the barrenness of winter." He next refers to certain interesting specimens presented to the museum by Sir Philip Egerton, showing the interesting fact, "that if a buck be castrated while his antlers are still covered with velt, their growth is checked, they remain as if truncated, and irregular nodules of bone project from their surfaces." "The fact is not, hitherto, explained; it is inexplicable, by believing that the materials which, in the formation of these organs of external sexual character, are removed from the blood, leave or maintain the blood in the state necessary for the further development, growth and active function of the proper sexual or reproductive organs." "The concurrent development of the thymus gland and air breathing organs during the body's growth of the thyroid gland and the brain, (instances

7

~~P. fissifolia~~

July 6 1867

695

Gros ventres Pass

20 stamens, globose or rather hemisphaerical, naked receptacle — rounded petals — numerous glab. ovaries with very short terminal styles.

ovary x10   stam x10

Connective very broad, darkish
anthercells horseshoe-like united, narrow

fol. pinn.

Alex. Leitch,

APOTHECARY & CHEMIST,

Cor 4th & Olive Sts. St. Louis.

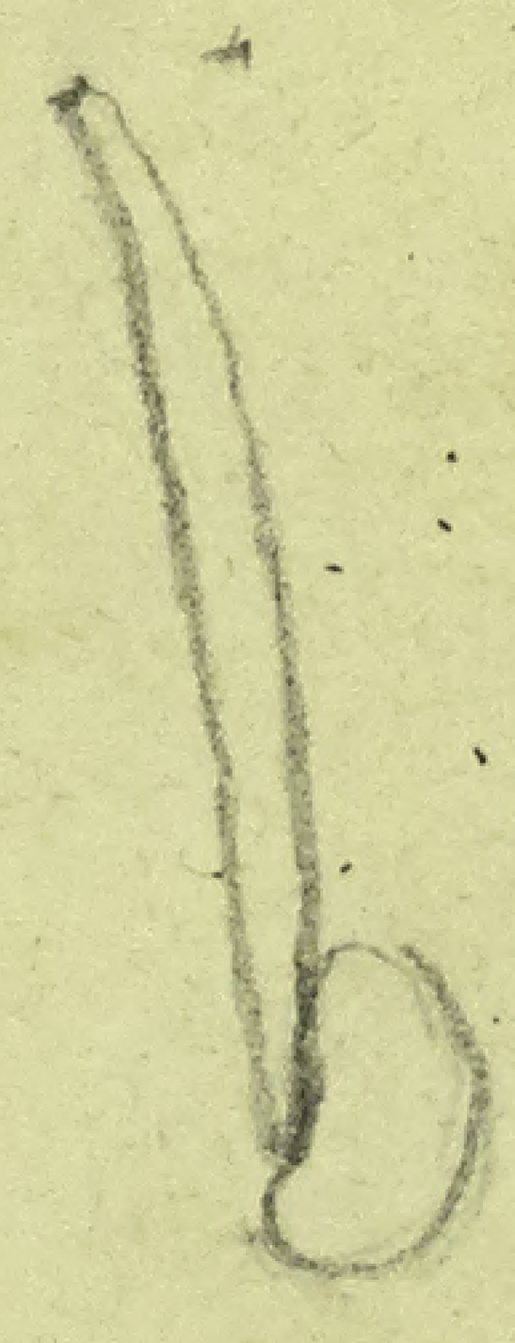
June 15 1867

P. rupestris

Martigny 1867

696

x 10



few facial wrinkles

x 10

20. stamens
anther cells
running together

Pollen grain
x 415

ALEX. LEITCH.

APOTHECARY & PHARMACEUTIST,

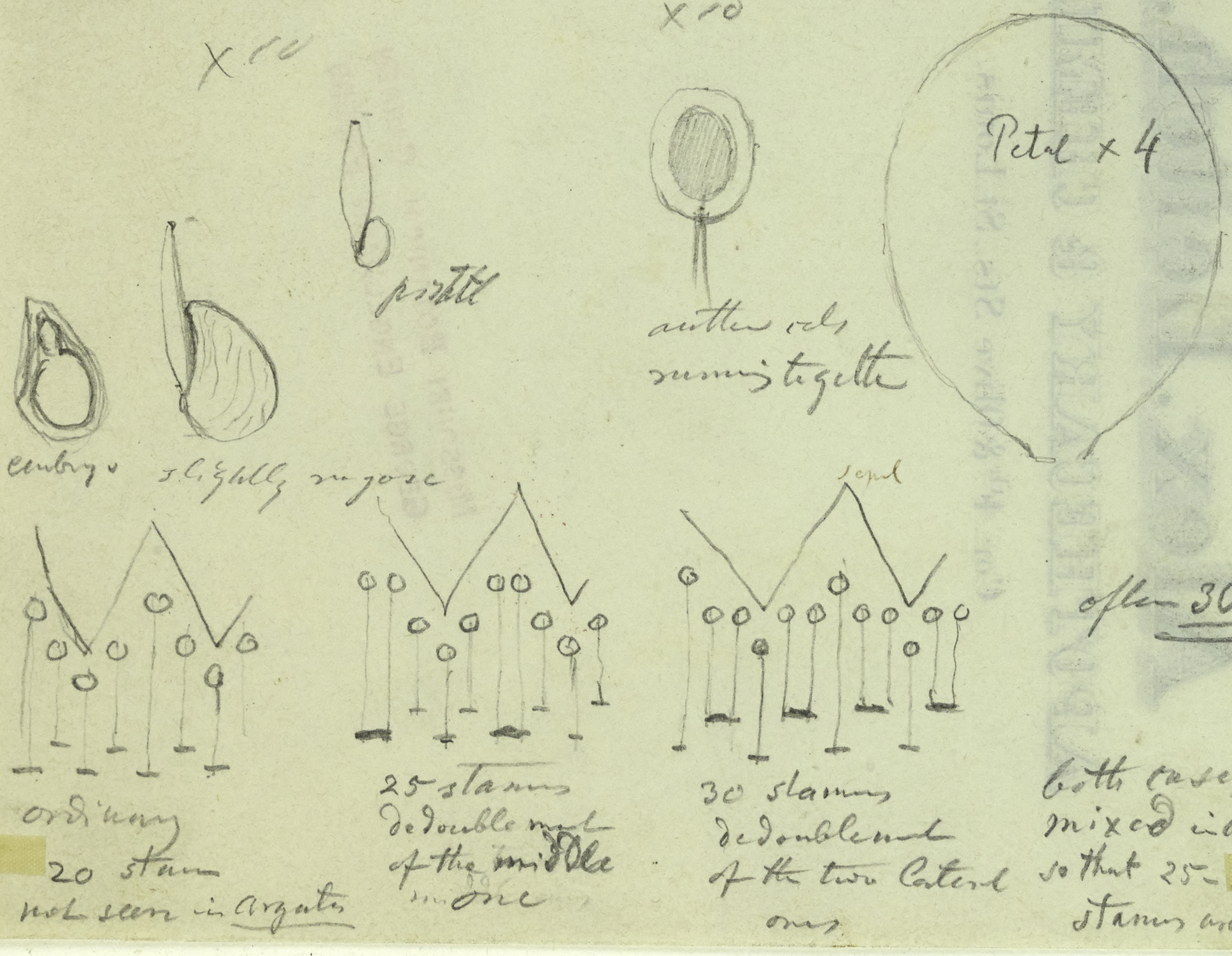
Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

P. argute

Jan 12 1867

Illinois

697



Alex. Leitch,

APOTHECARY & CHEMIST,

Cor. 4th & Olive Sts., St. Louis.

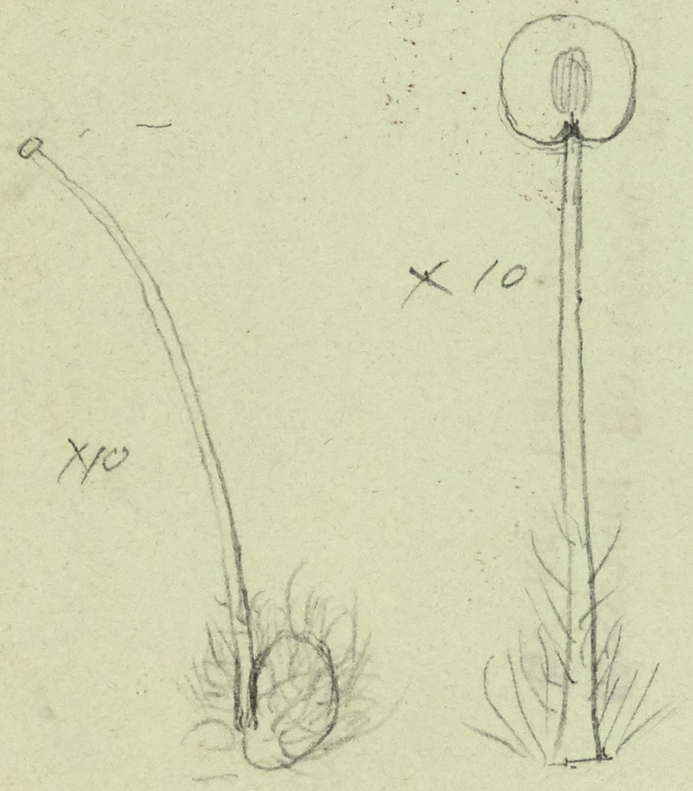
6

P. tridentata

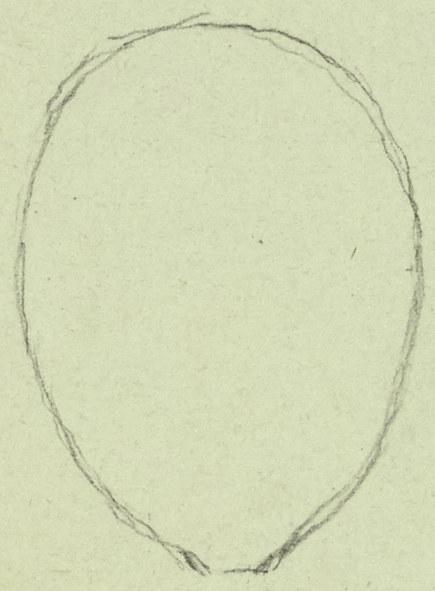
Labrador

Jun 11 1867

698



achen villous with basal style



petal x4

white

x4

middle stam before sepal shorter than lateral ones

in Missouri sp. middle longest!

dentiform anthers cells confluent 20 stamens as long as sepals filaments villous at base

Alex. Leitch,

APOTHECARY & CHEMIST,

Cor. 4th & Olive Sts., St. Louis.

C

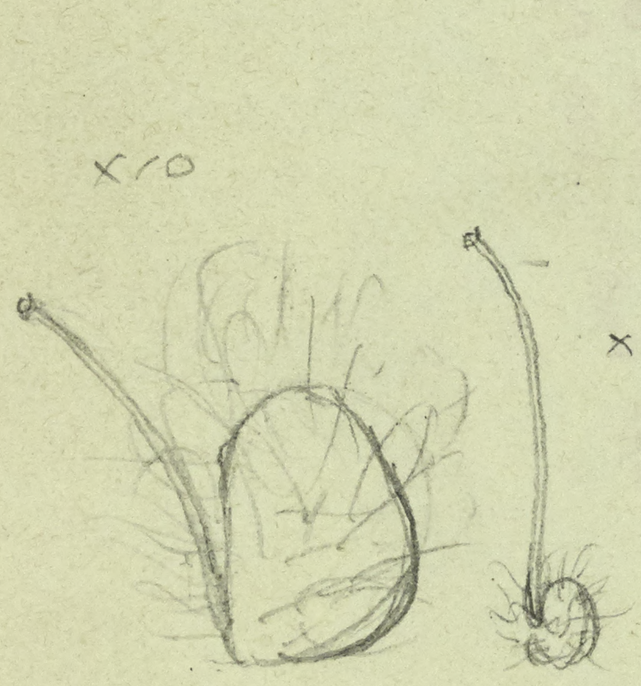
P. tridentata

June 11 1897

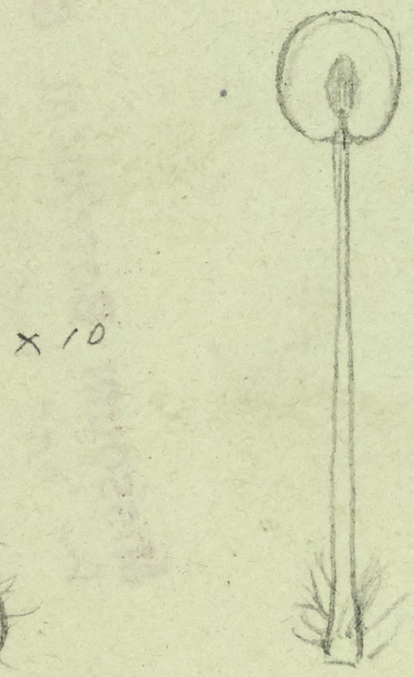
Wrightii, Hale

699

×10



×10



middle stem longer than other, pink as usual

petal ×4

Alex. Leitch,

APOTHECARY & CHEMIST,

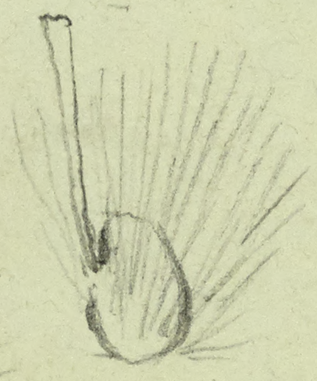
Cor. 4th & Olive Sts., St. Louis.

a

P. fruticosa

Hagdon, June 12 1867

ripe achen



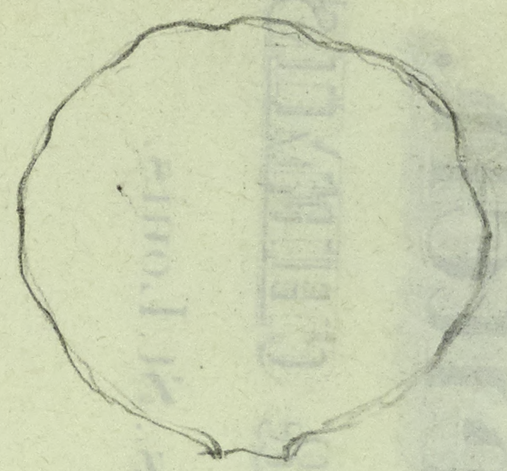
very young fruit

pistils

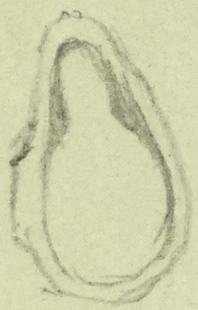
20 stamens

both anther cells united

Horse shoe like



Petal ×4



achen open

embryo

Alex. Leitch,

APOTHECARY & CHEMIST,

Cor. 4th & Olive Sts., St. Louis.

P. canlescens

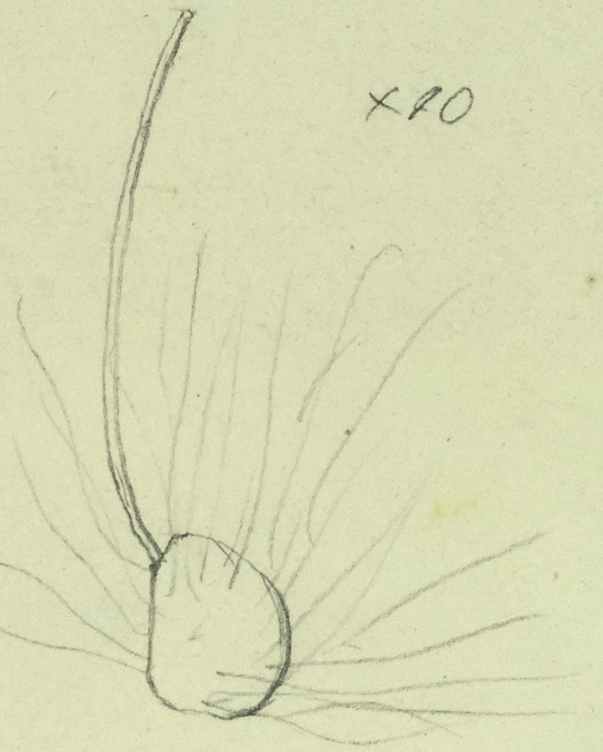
June 14 1867

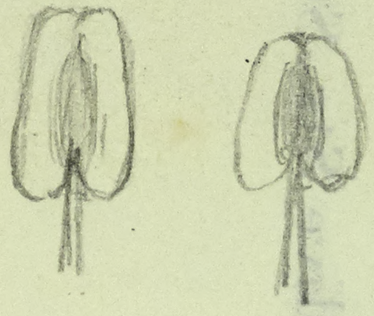
Bex, Switzerland

701

×10

×10





ex. Leitch,

HECARY & CHEMIST,

Cor. 4th & Olive Sts., St. Louis.

VI. The appearance of negative electricity was connected in

1861. No. times.	1862. No. times.	
30	32	with thunderstorms.
23	28	with rains without thunder and lightning.
20	4	with dry storms (without rain and without thunder and lightning).
4	3	with snow.
1	0	with fog.
78	67	

VII. *Relation of Rain and Snow to Electricity.*

Rain without thunderstorm was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861.	In 1862.	In 1861.	In 1862.	In 1861.	In 1862.
January	7	5	3	2		2
February	2	1	4	1		
March		5	6	4		
April	8	6	7	11		1
May	10	7	1	1	3	1
June	7	1				3
July	2	4				3
August	3		1		1	2
September	4			1	4	8
October	3	1	1	1	7	1
November	2	3		7		7
December	2	3				6
	50 + el.	36 + el.	23 — el.	28 — el.	15 no el.	34 no el.

Snowing was accompanied

	By Positive Electricity.		By Negative Electricity.		By no Electricity.	
	In 1861.	In 1862	In 1861.	In 1862.	In 1861.	In 1862.
January	3	9		2		
February	12	8		1		
March	3	12				
October		1				
November		4				
December	5	2	2			1
	23 + el.	36 + el.	2 — el.	3 — el.		1 no el.

REMARKS.

The monthly mean of atmospheric electricity in 1862 was not quite so regular as that in 1861. While in 1861 an un-

interrupted descent and ascent took place from January to December, we find in 1862 some interruptions in the steps of that ladder. The electricity in February, 1862, is about four degrees higher than that of January, April somewhat higher than March, and July is the lowest instead of September in 1861. These trifling irregularities may be accounted for by differences in temperature and relative humidity, and by a greater number of thunderstorms in 1862. January of 1862, for instance, was so unusually rainy, that its relative humidity too was unusually high, diminishing thus electricity. But the general features of distribution of electricity throughout the year are apparent in both years, and we may in that respect divide the twelve months of each year into two or three groups. Computing the months which give the highest electricity and those which give the lowest in each year, we find that in both years the months of January, February, March, April, November and December exhibit the highest, and the months of May, June, July, August, September and October the lowest electricity. The first group gives

The aggregate monthly mean of	71.5	degrees of	electricity	in 1861
and	74.6	"	"	" 1862
While the second group gives	29.0	"	"	" 1861
and	25.7	"	"	" 1862

The second group prevailed therefore in 1861, and the 1st in 1862.

Or we may divide the twelve months of each year into three groups. The first group with the highest electricity is formed by the months of January, February, November and December; the second with a mean electricity by the months of March, April, May and October; and the third with the lowest electricity by the months of June, July, August and September.

The aggregate monthly mean of

The first group in 1861 is	52.9	—in 1862,	54.6	
The second " "	33.5	"	35.2	
The third " "	14.1	"	10.5	

Thus in 1861 the third group prevailed, and in 1862 the first and second. But these differences are so well balanced throughout the year, that the mean of the whole year in 1861 and in 1862 is exactly the same, namely, 8.4. Such an identity in the yearly result, even to decimals, is of course not to be expected every year; but it seems to prove, at least, that the yearly mean of electricity is as constant as that of temperature, of relative humidity, and of atmospheric pressure.

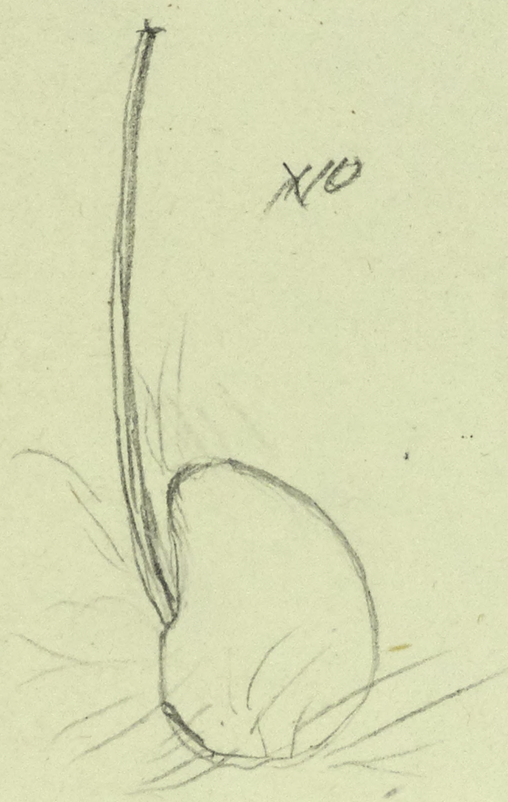
The third table, showing the daily periodicity of atmospheric electricity, confirms the daily two maxima and two minima of electricity as an undeniable fact.

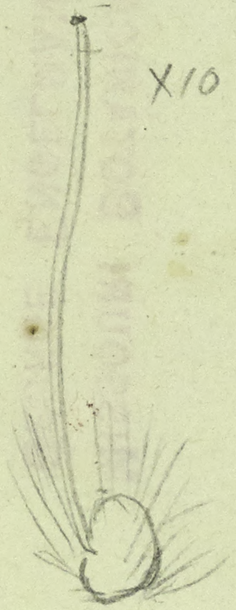
Palba

Jun 16 1867

Bankfield

702





anthers vally
not confluent

Alex. Leitch,

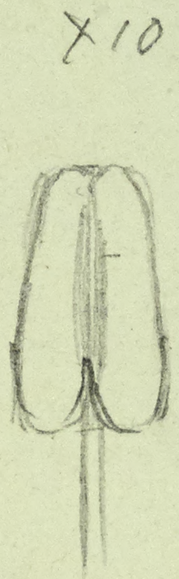
APOTHECARY & CHEMIST,

Cor. 4th & Olive Sts., St. Louis.

R. alchemilloides June 14 1867

Pyrenées

703



Alex. Leitch,

POTHECARY & CHEMIST,

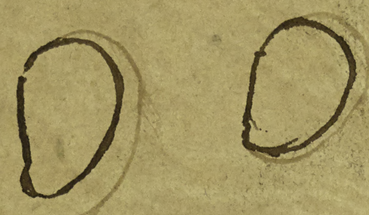
Cor. 4th & Olive Sts., St. Louis.

1. 

sem. Potent. norvegica, Ann in Bottle
St Louis

rugose-costate, brown

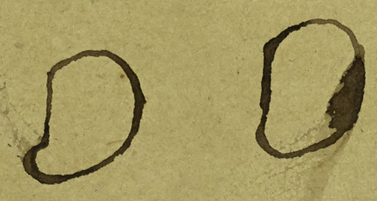
704 35-54

2. 

sm. Potent. millegrana biennial

smooth, light brown

collect. Eg Lehmann & Dinkholz
on the St Louis Common

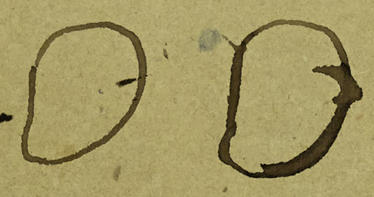
3. 

sem. Potentilla millegrana

smooth light brown

Hurt Carbrook
(Tow Texas?)

very similar the foregoing, as also
the plant is

4 

Potentilla pentandra

Fort Gibson

very similar the two foregoing
seed not to be distinguished

5. 

Potentilla pennsylvanica Mutt

Dark reddish brown

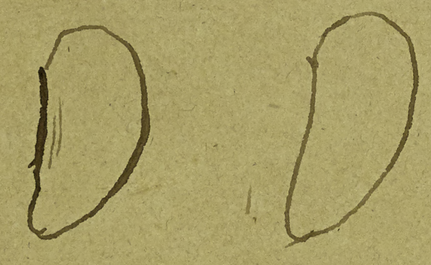
St Louis

6 

Potentilla supina L

brown

Germany

7 

Pot. canadensis L

light, yellowish brown

St Louis

8 

Pot argutta Pursh

Northern Illinois